Multiple Choice Questions. (25 points; 2.5 pts each)

#1. In the classical model, according to the quantity theory and the Fisher equation, an increase in money growth increases:

A) output.
B) velocity.
C) the nominal interest rate.
D) the real interest rate.

#2. If inflation is 6 percent and a worker receives a 4 percent wage increase, then the worker's real wage:

A) increased 4 percent.
B) increased 2 percent.
C) decreased 2 percent.
D) decreased 6 percent.

#3. If domestic spending exceeds output, we ______ the difference—net exports are ______.

A) import; negative
B) export; positive
C) import; positive
D) export; negative

#4. The nominal exchange rate between the U.S. dollar and the Japanese yen is the:

A) number of yen you can get for lending one dollar in Japan for one year.
B) number of yen you can get for one dollar.
C) price of U.S. goods divided by the price of Japanese goods.
D) price of Japanese goods divided by the price of U.S. goods.

#5. In a small open economy, if the government adopts a policy that lowers imports, then that policy:

A) raises the real exchange rate and increases net exports.
B) raises the real exchange rate and does not change net exports.
C) raises the real exchange rate and decreases net exports.
D) lowers the real exchange rate.
#6. The nominal interest rate is equal to the

A) inflation rate.
B) real interest rate.
C) real interest rate minus the inflation rate.
D) real interest rate plus the inflation rate.

#7. If the velocity of money remains constant while the quantity of money and real GDP doubles, the

A) price level will double.
B) price level will remain constant.
C) price level will fall.
D) inflation rate will double.

#8. One of the primary social costs of long-term inflation is

A) to reduce the purchasing power of personal income.
B) to adversely impact saving decisions.
C) to distort relative prices when firms are faced with menu costs.
D) all the above.

#9. Minimum wage laws cause

A) frictional unemployment.
B) structural unemployment.
C) deflation.
D) budget deficits.

#10. One of Donald Trump’s primary macroeconomic campaign pledges is to

A) reduce taxes and regulation to create 3.5% growth in real GDP.
B) increase inflation.
C) increase the minimum wage.
D) repeal Okun’s law.
**Problem Solving / Essay Questions. (75 points)**

#11. (30 pts) Consider the following Neoclassical model of the economy, where the domestic interest rate $r$ and the world interest rate $r_*$ are in percentage terms. Show all your work.

<table>
<thead>
<tr>
<th>Supply</th>
<th>Demand</th>
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<tbody>
<tr>
<td>$Y = 1000$</td>
<td>$C = 100 + 0.8(Y - T)$</td>
</tr>
<tr>
<td>$NX = 100 - 100\epsilon$</td>
<td>$I = 200 - 10r$</td>
</tr>
<tr>
<td>$r_* = 5%$</td>
<td>$G = 0, T = 0$</td>
</tr>
</tbody>
</table>

(a) (10 pts) Find the equilibrium real interest rate, national saving, and investment in a closed economy with no public sector. Show the equilibrium real interest rate on a saving-investment diagram with $r$ measured on the vertical axis.

(b) (10 pts) Now assume the small economy opens up to trade. Calculate the real exchange rate, trade balance and net capital outflow. Show the trade balance on a saving-investment diagram with $\epsilon$ measured on the vertical axis.

(c) (10 pts) The price level in the domestic and foreign countries is initially equal to $P = P_* = 100$. The foreign country is experiencing rapid growth in real GDP of 8% and targets a 2% inflation rate. The domestic country is experiencing no growth in real GDP or the price level. What does the central bank in the foreign country need to do to hit the inflation target and what will be the resulting nominal exchange rate? Defend your answer.
#12. (30 pts) AD-SRAS-LRAS model of the economy. Assume the SRAS curve is horizontal.

(a) (15 pts) Assume the uncertainty associated with upcoming presidential and congressional elections is leading U.S. consumers to be cautious and reduce their confidence about the future path of the economy. As a result, they save more and consume less. Use the AD-SRAS-LRAS diagram to discuss the predicted short-run and long-run impacts on the price level, real GDP and unemployment.

(b) (15 pts) What are the policy options available to the Federal Reserve to address the fall in consumer confidence? What are the policy options available to fiscal policymakers? Use an AD-SRAS-LRAS diagram to support your discussion.
#13. (15 pts) True or False. If “False”, correct the statement to make it true.

(a) (5 pts) “If inflation is zero in two countries, then purchasing power parity ($\epsilon = 1$) must exist between the two countries.”

(b) (5 pts) “Nominal GDP is less than M1 in the United States.”

(c) (5 pts) “Labor force participation rates in the U.S. have been falling in past years, primarily due to changing demographics and retirement of the ‘baby boomers’.”